

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/S31/S32

Source: PCI

Date Processed by STIC: 4-25-05

ENTERED



PCT

RAW SEQUENCE LISTING

DATE: 04/25/2005

PATENT APPLICATION: US/10/531,532

TIME: 12:26:00

Input Set : A:\MNM001PC.txt

Output Set: N:\CRF4\04252005\J531532.raw

4 <110> APPLICANT: MILLENIU PHARMACEUTICALS, INC., et al.
 6 <120> TITLE OF INVENTION: SPLEEN TYROSINE KINASE CATALYTIC DOMAIN: CRYSTAL
 7 STRUCTURE AND BINDING POCKETS THEREOF
 9 <130> FILE REFERENCE: MNM/001 PCT
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/531,532
 C--> 12 <141> CURRENT FILING DATE: 2005-04-15
 14 <150> PRIOR APPLICATION NUMBER: 60/419,382
 15 <151> PRIOR FILING DATE: 2002-10-16
 17 <160> NUMBER OF SEQ ID NOS: 11
 19 <170> SOFTWARE: PatentIn Ver. 3.2
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 635
 23 <212> TYPE: PRT
 24 <213> ORGANISM: Homo sapiens
 26 <400> SEQUENCE: 1
 27 Met Ala Ser Ser Gly Met Ala Asp Ser Ala Asn His Leu Pro Phe Phe
 28 1 5 10 15
 30 Phe Gly Asn Ile Thr Arg Glu Glu Ala Asp Tyr Leu Val Gln Gly
 31 20 25 30
 33 Gly Met Ser Asp Gly Leu Tyr Leu Leu Arg Gln Ser Arg Asn Tyr Leu
 34 35 40 45
 36 Gly Gly Phe Ala Leu Ser Val Ala His Gly Arg Lys Ala His His Tyr
 37 50 55 60
 39 Thr Ile Glu Arg Glu Leu Asn Gly Thr Tyr Ala Ile Ala Gly Gly Arg
 40 65 70 75 80
 42 Thr His Ala Ser Pro Ala Asp Leu Cys His Tyr His Ser Gln Glu Ser
 43 85 90 95
 45 Asp Gly Leu Val Cys Leu Leu Lys Lys Pro Phe Asn Arg Pro Gln Gly
 46 100 105 110
 48 Val Gln Pro Lys Thr Gly Pro Phe Glu Asp Leu Lys Glu Asn Leu Ile
 49 115 120 125
 51 Arg Glu Tyr Val Lys Gln Thr Trp Asn Leu Gln Gly Gln Ala Leu Glu
 52 130 135 140
 54 Gln Ala Ile Ile Ser Gln Lys Pro Gln Leu Glu Lys Leu Ile Ala Thr
 55 145 150 155 160
 57 Thr Ala His Glu Lys Met Pro Trp Phe His Gly Lys Ile Ser Arg Glu
 58 165 170 175
 60 Glu Ser Glu Gln Ile Val Leu Ile Gly Ser Lys Thr Asn Gly Lys Phe
 61 180 185 190
 63 Leu Ile Arg Ala Arg Asp Asn Asn Gly Ser Tyr Ala Leu Cys Leu Leu
 64 195 200 205
 66 His Glu Gly Lys Val Leu His Tyr Arg Ile Asp Lys Asp Lys Thr Gly
 67 210 215 220

RAW SEQUENCE LISTING

DATE: 04/25/2005

PATENT APPLICATION: US/10/531,532

TIME: 12:26:00

Input Set : A:\MNM001PC.txt

Output Set: N:\CRF4\04252005\J531532.raw

```

69  Lys Leu Ser Ile Pro Glu Gly Lys Lys Phe Asp Thr Leu Trp Gln Leu
70  225                230                235                240
72  Val Glu His Tyr Ser Tyr Lys Ala Asp Gly Leu Leu Arg Val Leu Thr
73                245                250                255
75  Val Pro Cys Gln Lys Ile Gly Thr Gln Gly Asn Val Asn Phe Gly Gly
76                260                265                270
78  Arg Pro Gln Leu Pro Gly Ser His Pro Ala Thr Trp Ser Ala Gly Gly
79                275                280                285
81  Ile Ile Ser Arg Ile Lys Ser Tyr Ser Phe Pro Lys Pro Gly His Arg
82                290                295                300
84  Lys Ser Ser Pro Ala Gln Gly Asn Arg Gln Glu Ser Thr Val Ser Phe
85  305                310                315                320
87  Asn Pro Tyr Glu Pro Glu Leu Ala Pro Trp Ala Ala Asp Lys Gly Pro
88                325                330                335
90  Gln Arg Glu Ala Leu Pro Met Asp Thr Glu Val Tyr Glu Ser Pro Tyr
91                340                345                350
93  Ala Asp Pro Glu Glu Ile Arg Pro Lys Glu Val Tyr Leu Asp Arg Lys
94                355                360                365
96  Leu Leu Thr Leu Glu Asp Lys Glu Leu Gly Ser Gly Asn Phe Gly Thr
97                370                375                380
99  Val Lys Lys Gly Tyr Tyr Gln Met Lys Lys Val Val Lys Thr Val Ala
100  385                390                395                400
102  Val Lys Ile Leu Lys Asn Glu Ala Asn Asp Pro Ala Leu Lys Asp Glu
103                405                410                415
105  Leu Leu Ala Glu Ala Asn Val Met Gln Gln Leu Asp Asn Pro Tyr Ile
106                420                425                430
108  Val Arg Met Ile Gly Ile Cys Glu Ala Glu Ser Trp Met Leu Val Met
109                435                440                445
111  Glu Met Ala Glu Leu Gly Pro Leu Asn Lys Tyr Leu Gln Gln Asn Arg
112                450                455                460
114  His Val Lys Asp Lys Asn Ile Ile Glu Leu Val His Gln Val Ser Met
115  465                470                475                480
117  Gly Met Lys Tyr Leu Glu Glu Ser Asn Phe Val His Arg Asp Leu Ala
118                485                490                495
120  Ala Arg Asn Val Leu Leu Val Thr Gln His Tyr Ala Lys Ile Ser Asp
121                500                505                510
123  Phe Gly Leu Ser Lys Ala Leu Arg Ala Asp Glu Asn Tyr Tyr Lys Ala
124                515                520                525
126  Gln Thr His Gly Lys Trp Pro Val Lys Trp Tyr Ala Pro Glu Cys Ile
127                530                535                540
129  Asn Tyr Tyr Lys Phe Ser Ser Lys Ser Asp Val Trp Ser Phe Gly Val
130  545                550                555                560
132  Leu Met Trp Glu Ala Phe Ser Tyr Gly Gln Lys Pro Tyr Arg Gly Met
133                565                570                575
135  Lys Gly Ser Glu Val Thr Ala Met Leu Glu Lys Gly Glu Arg Met Gly
136                580                585                590
138  Cys Pro Ala Gly Cys Pro Arg Glu Met Tyr Asp Leu Met Asn Leu Cys
139                595                600                605
141  Trp Thr Tyr Asp Val Glu Asn Arg Pro Gly Phe Ala Ala Val Glu Leu

```

RAW SEQUENCE LISTING

DATE: 04/25/2005

PATENT APPLICATION: US/10/531,532

TIME: 12:26:00

Input Set : A:\MNM001PC.txt

Output Set: N:\CRF4\04252005\J531532.raw

```

142          610          615          620
144      Arg Leu Arg Asn Tyr Tyr Tyr Asp Val Val Asn
145      625          630          635
148 <210> SEQ ID NO: 2
149 <211> LENGTH: 8
150 <212> TYPE: PRT
151 <213> ORGANISM: Artificial Sequence
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
156 <220> FEATURE:
157 <221> NAME/KEY: MOD_RES
158 <222> LOCATION: (1)
159 <223> OTHER INFORMATION: NAc-Glu
161 <220> FEATURE:
162 <223> OTHER INFORMATION: c-term amidation
164 <400> SEQUENCE: 2
165      Glu Glu Asp Asp Tyr Glu Ser Pro
166      1          5
169 <210> SEQ ID NO: 3
170 <211> LENGTH: 39
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Primer
177 <400> SEQUENCE: 3
178      cgcggatccg ccaccatgga cacagagggtg tacgagagc          39
182 <210> SEQ ID NO: 4
183 <211> LENGTH: 58
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Primer
190 <400> SEQUENCE: 4
191      cggcggatcc ttaatgatga tgatgatgat gggtcaccac gtcatagtag taattgcg          58
195 <210> SEQ ID NO: 5
196 <211> LENGTH: 8
197 <212> TYPE: PRT
198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
201 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
203 <400> SEQUENCE: 5
204      Glu Glu Asp Asp Tyr Glu Ser Pro
205      1          5
208 <210> SEQ ID NO: 6
209 <211> LENGTH: 5
210 <212> TYPE: PRT
211 <213> ORGANISM: Artificial Sequence
213 <220> FEATURE:
214 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide

```

RAW SEQUENCE LISTING

DATE: 04/25/2005

PATENT APPLICATION: US/10/531,532

TIME: 12:26:00

Input Set : A:\MNM001PC.txt

Output Set: N:\CRF4\04252005\J531532.raw

```

216 <400> SEQUENCE: 6
217     Asp Glu Glu Asp Tyr
218         1             5
221 <210> SEQ ID NO: 7
222 <211> LENGTH: 5
223 <212> TYPE: PRT
224 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
229 <400> SEQUENCE: 7
230     Asp Glu Glu Tyr Asp
231         1             5
234 <210> SEQ ID NO: 8
235 <211> LENGTH: 5
236 <212> TYPE: PRT
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
242 <400> SEQUENCE: 8
243     Asp Glu Tyr Glu Asp
244         1             5
247 <210> SEQ ID NO: 9
248 <211> LENGTH: 5
249 <212> TYPE: PRT
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
255 <400> SEQUENCE: 9
256     Asp Tyr Glu Glu Val
257         1             5
260 <210> SEQ ID NO: 10
261 <211> LENGTH: 5
262 <212> TYPE: PRT
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
268 <220> FEATURE:
269 <221> NAME/KEY: MOD_RES
270 <222> LOCATION: (5)
271 <223> OTHER INFORMATION: Nle
273 <400> SEQUENCE: 10
W--> 274     Tyr Ser Ile Ile Xaa
275         1             5
278 <210> SEQ ID NO: 11
279 <211> LENGTH: 26
280 <212> TYPE: PRT
281 <213> ORGANISM: Artificial Sequence
283 <220> FEATURE:
284 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus

```

RAW SEQUENCE LISTING

DATE: 04/25/2005

PATENT APPLICATION: US/10/531,532

TIME: 12:26:00

Input Set : A:\MM001PC.txt

Output Set: N:\CRF4\04252005\J531532.raw

```

285     sequence
287 <220> FEATURE:
288 <221> NAME/KEY: MOD_RES
289 <222> LOCATION: (6)..(12)
290 <223> OTHER INFORMATION: Variable amino acid
292 <220> FEATURE:
293 <221> NAME/KEY: MOD_RES
294 <222> LOCATION: (14)
295 <223> OTHER INFORMATION: Variable amino acid
297 <220> FEATURE:
298 <221> NAME/KEY: MOD_RES
299 <222> LOCATION: (16)
300 <223> OTHER INFORMATION: Variable amino acid
302 <220> FEATURE:
303 <221> NAME/KEY: MOD_RES
304 <222> LOCATION: (20)
305 <223> OTHER INFORMATION: Variable amino acid
307 <400> SEQUENCE: 11
W--> 308     Asp Phe Gly Trp Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Thr Xaa
      309         1             5             10             15
      311     Cys Gly Thr Xaa Asp Tyr Leu Pro Pro Glu
      312         20             25

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/531,532

DATE: 04/25/2005
TIME: 12:26:01

Input Set : A:\MM001PC.txt
Output Set: N:\CRF4\04252005\J531532.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:10; Xaa Pos. 5

Seq#:11; Xaa Pos. 6, 7, 8, 9, 10, 11, 12, 14, 16, 20

VERIFICATION SUMMARY

DATE: 04/25/2005

PATENT APPLICATION: US/10/531,532

TIME: 12:26:01

Input Set : A:\MNM001PC.txt

Output Set: N:\CRF4\04252005\J531532.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
M:341 Repeated in SeqNo=11